

FIG. 1

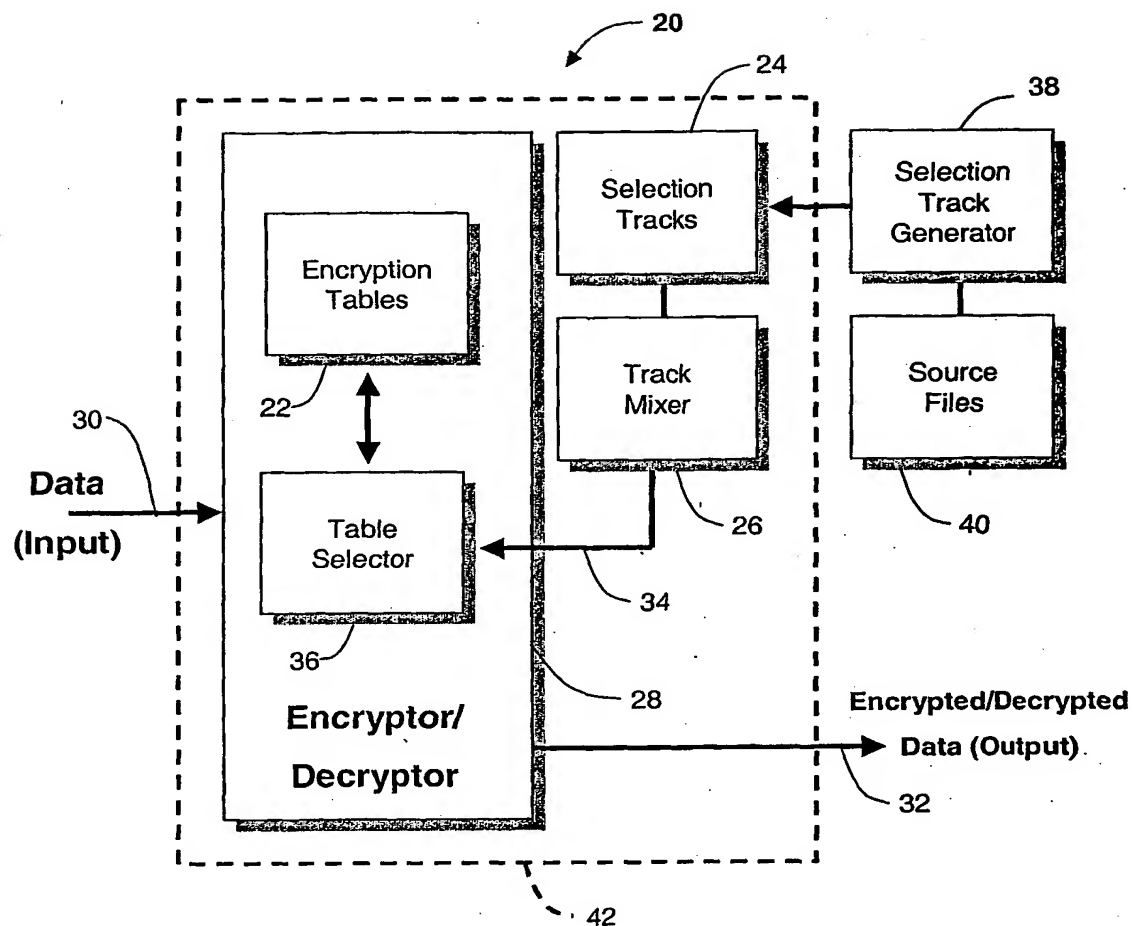


FIG. 2

10/522509

50

← 54

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
1	10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F
2	20	21	22	23	24	25	26	27	28	29	2A	2B	2C	2D	2E	2F
3	30	31	32	33	34	35	36	37	38	39	3A	3B	3C	3D	3E	3F
4	40	41	42	43	44	45	46	47	48	49	4A	4B	4C	4D	4E	4F
5	50	51	52	53	54	55	56	57	58	59	5A	5B	5C	5D	5E	5F
6	60	61	62	63	64	65	66	67	68	69	6A	6B	6C	6D	6E	6F
7	70	71	72	73	74	75	76	77	78	79	7A	7B	7C	7D	7E	7F
8	80	81	82	83	84	85	86	87	88	89	8A	8B	8C	8D	8E	8F
9	90	91	92	93	94	95	96	97	98	99	9A	9B	9C	9D	9E	9F
A	A0	A1	A2	A3	A4	A5	A6	A7	A8	A9	AA	AB	AC	AD	AE	AF
B	B0	B1	B2	B3	B4	B5	B6	B7	B8	B9	BA	BB	BC	BD	BE	BF
C	C0	C1	C2	C3	C4	C5	C6	C7	C8	C9	CA	CB	CC	CD	CE	CF
D	D0	D1	D2	D3	D4	D5	D6	D7	D8	D9	DA	DB	DC	DD	DE	DF
E	E0	E1	E2	E3	E4	E5	E6	E7	E8	E9	EA	EB	EC	ED	EE	EF
F	F0	F1	F2	F3	F4	F5	F6	F7	F8	F9	FA	FB	FC	FD	FE	FF

↑
52

Encryption Table Example
(Unitary Transform)

FIG. 3A

10/522509

60

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	12	50	D4	B7	27	61	0D	BD	30	1B	F7	7B	23	B1	48	AF
1	99	B6	26	05	6B	D3	34	8C	AE	55	39	B0	A1	71	19	81
2	79	A7	5B	DD	54	42	CF	90	2C	9A	D5	03	49	F8	65	A3
3	E9	1D	86	33	A6	09	4A	14	F6	43	88	A8	F1	5D	47	C3
4	3E	DB	F0	41	00	B5	C6	A2	60	76	24	53	94	0E	6D	70
5	63	7D	25	3D	EA	68	59	80	28	C4	11	F9	CB	E0	3A	9D
6	40	BF	5F	98	2D	FE	20	BC	01	8E	A0	5A	6C	82	16	8A
7	CD	10	56	69	8D	83	C0	75	DE	22	85	F2	35	EB	7A	B2
8	74	FF	2E	C7	E6	9F	29	15	4B	E4	BE	0B	77	3C	FA	AD
9	DC	B4	E3	91	0A	CE	B3	6A	FD	1A	44	8F	E5	D6	1C	64
A	21	18	D9	36	9B	45	2B	D7	67	C5	E2	2F	AC	57	89	DF
B	F5	CC	02	FC	A4	92	F4	13	87	3B	B8	8B	04	4C	5E	93
C	7E	A9	3F	84	06	E1	31	D2	C8	6E	1E	52	EC	AB	0F	F3
D	AA	1F	BA	E8	5C	95	4D	7C	46	D8	A5	32	72	9C	58	66
E	9E	4F	D1	37	BB	EF	17	CA	ED	08	DA	96	C2	07	2A	B9
F	0C	FB	EE	62	97	4E	E7	78	51	C1	38	D0	6F	7F	C9	73

Encryption Table Example 1

FIG. 3B

10/522509

70

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	67	52	E9	80	B1	A5	10	F3	51	DD	EA	21	3A	05	93	4B
1	14	64	07	F2	40	7F	62	30	C4	E4	B0	D8	9E	1B	D1	28
2	D5	89	B7	38	FC	00	FA	90	1A	AE	39	47	7C	CB	5E	DC
3	9D	FF	87	F5	13	AF	75	2D	ED	2A	6E	0A	FB	36	73	BB
4	F6	0C	50	48	9A	70	20	C3	46	AA	F4	76	69	94	19	82
5	E0	D4	FE	24	79	35	EC	7B	66	0D	22	41	C5	4E	E3	5F
6	1E	63	B8	8D	45	86	A0	0B	99	8C	A7	37	91	D9	B2	3B
7	B9	FD	57	31	23	C6	61	E1	60	27	44	EB	02	72	DE	A9
8	DF	01	F8	DA	F1	78	F9	53	34	71	DB	5D	68	E2	26	56
9	58	E6	88	11	4A	D6	06	4C	BE	5A	1F	3C	D2	18	EE	A3
A	81	2C	C8	33	98	F7	95	2F	85	43	83	2E	9F	A8	BA	27
B	65	AB	D3	A1	7D	2B	B6	16	74	08	3F	CE	AD	92	0E	D0
C	F0	8E	15	E8	9C	3D	CC	6A	D7	B3	9B	7E	12	77	6D	8B
D	29	EF	C7	7A	04	BD	42	C0	59	32	1D	54	CF	25	C2	CA
E	E7	09	A6	6F	E5	8F	6B	0F	C9	A2	C1	96	BC	03	5B	4D
F	BF	5C	4F	B4	1C	55	AC	CD	6C	49	84	3E	A4	8A	97	B5

Encryption Table Example 2

FIG. 3C

10/522509

```

27610: A2 E1 7B DC C0 67 52 3D - D5 76 A4 53 BC A7 12 8E ...<.gR=.v.$....
27620: 90 02 A6 EE 2A DB FC B6 - C6 A0 11 35 32 36 83 4F .....*.....526.0
27630: 4A BE 1B C4 04 43 D2 BD - F5 11 60 62 D3 22 5A 26 J....C.....b."Z&
27640: 05 35 B2 77 A6 CB 06 EF - 0C 75 32 B2 F7 EE F5 B7 .S.w.....u2.....
27650: DA 9C 52 DC 55 13 7E 1A - 60 4E C6 76 86 67 A5 6D ...R.U..~'N.v.g.m
27660: F6 CD E2 B8 24 DC 98 1A - AB 06 B0 10 64 04 EE BE .....$.d.....
27670: 95 B1 FE CA 12 E3 56 8F - C4 1E 01 FA 47 D1 5A B8 .....U.....G.Z.
27680: 03 40 7A 91 77 A4 DB 9B - E6 73 E7 4E 70 E5 CE B7 .Ez.w.....s.Np...
27690: 7B D3 D5 26 ED 44 C8 04 - 4A B7 F2 57 A2 72 82 BE (<.&.D..J..W.r...
27700: 3F DF 58 73 36 28 EF 28 - FF BE C2 24 32 2F 90 0D ?..Xs6(<...$2/..
27710: 3A 30 F1 BF D1 F3 50 07 - 38 53 6A B9 4A D6 32 E0 :0....P.8Sj.J.2.
27720: DE FE CF D0 DB D6 2E D5 - DC C9 21 A3 48 6B 0C 41 .....?..Hk.A
27730: 14 47 A6 2B B5 24 5A CB - D6 1D 06 C0 C2 6C 28 15 .G.+.$Z.....l<.
27740: D8 B4 D8 5C 9E 65 34 3E - 8F FE 80 78 88 AD CA FF ...\.e4>....x....
27750: DC ED D3 40 8A FD 22 B5 - F0 49 BC 50 8C 58 FB 70 ...E..".I.P.X.p
27760: 0C 3D C1 FC 73 42 AC C6 - 01 8D CA 74 45 A8 4C 99 ...sB.....tE.L.
27770: 78 56 36 9A E6 EE 4F 4C - 4C 16 4E 04 87 CC F2 C6 x06....OLL.N....
27780: A2 A9 38 3B 22 5F 32 A9 - 7C 89 F0 57 0D D1 8F D2 ...8;"2..l..U....
27790: C6 73 70 CF 6C 99 2C F7 - 04 EE FC 8C D6 41 4E 39 .sp.l.....AN9
27800: C8 01 11 6C 04 11 9B 98 - 6F 8D 9E 58 24 1C 98 C7 ...l.....o..X$.
27810: 26 48 B6 BF 5D 65 77 8C - 0E 03 B5 B7 96 5A 20 F3 8H..Jew.....Z..
27820: FC CA 3A A2 B4 27 46 18 - PE 07 B0 51 40 88 99 CB .....P.....QE...
27830: 98 5B 32 B7 C6 0C 74 0A - 18 1B 18 A0 66 2D 9D EA .[2...t.....f-..
27840: 80 0D 55 74 DC 9F 21 28 - 00 29 11 19 C7 9C 9C 22 ..Ut..!(<..).
27850: D6 8D 1F 0D 45 FC B8 3A - 0E E3 DA 3B 27 CE 91 1D .....E.....;'.
27860: 80 53 24 3B E5 C4 D5 37 - 29 5D 7A F0 61 B0 A9 AF .S$;...?>Jz.a...
27870: 12 EE EA A8 B2 0E A0 CB - 5A 34 4C DB 5A 2F 5A 8A .....Z4L.Z/Z..
27880: 06 95 AA C6 06 B7 70 66 - 04 FD 5A 45 7A B0 7F 89 .....pf..ZEz...
27890: 71 2C FE 41 0A 1B 27 0F - 42 44 7C 95 AE 9A 42 2D q..A..'.BD!...B-
27900: 34 38 21 AF AE F2 05 1D - E1 9E 20 B3 27 D5 72 0C 48!.....'r..
27910: 27 5F 1C 36 76 90 B8 1C - FE 61 E8 55 E9 42 98 1E '...6v.....a.U.B..
27920: 7A 5B 3A 65 82 54 4D 78 - 04 43 24 3B CC 9F 9B 24 z[=e.TMx.C$;...$
27930: 12 2E AC BD 98 18 F4 6E - FC 62 7C F2 1E D7 55 8E .....n.bi.....U.
27940: F1 5C D2 94 EF 3F C6 C6 - C0 F0 56 D2 48 16 71 1A .\.....?..U.H.q.
27950: 08 44 E4 02 F4 BC 72 8B - A9 6E 3B C1 D8 C2 05 E9 .D....r..n:.....
27960: C8 68 7A 63 58 C2 2D 62 - 18 77 96 40 B4 D4 B5 40 .hzcK..-b.w.e...e
27970: D3 64 FA 90 00 01 53 01 - 74 B6 DC 90 4E 2A 3C E3 .d.....S.t.....N*<.
27980: 7E 87 0C C6 66 B9 6B 0F - 30 CA 24 D7 F1 21 04 39 ~....f.k.0.$...!9
27990: 9A A3 C0 93 CA 5D FA F1 - C4 B4 50 39 48 10 2C 6A .....l.....P9H...j
28000: EA 69 10 D8 0E B3 7E 47 - 8C BA 55 A9 EC 14 88 C0 .i.....~G..U.....
28010: 76 78 92 F9 06 0D 88 18 - E4 EA EF C7 46 04 2A 1A vx.....F.*.
28020: 89 9E 19 8B D5 58 81 72 - 80 AF 60 3F 4C CD 34 68 .....X.r.....?L.4h
28030: 5D 19 70 70 8C 1C BF 5F - 55 5C E2 1C 4C 98 EE 67 l.pp....U\..L.g
28040: F6 D5 9A D8 90 01 F4 66 - 0A 69 BF FF 5E 0E 56 0D .....f.i..^..U.
28050: A8 C0 90 1B D0 CE 24 F5 - 1E E0 43 4C 78 3F 07 C7 .....$.CLx?...
28060: 68 6A 97 65 BE 74 48 14 - 78 FC F8 B4 20 67 2A 20 hj.e.th.x...g*
28070: CE 1B A0 50 8F 76 0C 5B - 76 63 DC 4A 6C E9 A9 42 ...P.v.[vc.J1..B
28080: 1E F0 6A 50 38 CC 04 9C - 27 1E 33 0B 54 93 68 CD ...jP8....'.3.I.h.
28090: 67 34 32 C8 EA 08 DB 2E - C6 8D AA 51 E0 C0 36 B5 g42.....Q..6.
28100: 82 D8 9D 05 A4 97 C4 57 - AC 50 55 2E 5A 95 65 C8 .....W.FU.Z.e.
28110: C0 E6 9A 27 51 68 9B EC - 7A 1F E1 36 A4 32 81 D2 ...'Qh..z..6.2..
28120: 14 F4 B0 E0 37 CE 60 43 - 7F 4F AF C7 A0 08 C0 BD .....7..C.O....
28130: 34 57 08 A9 1C 0F 48 CA - BC A6 1D 79 56 50 50 04 4W.....H.....yUPP.
28140: A0 4C AC F9 E6 1A DB BF - 73 3C F4 8F 39 71 28 EF .L.....s<..9q<.
28150: 75 6D 8A 3B 0A 62 B0 C0 - EE 10 06 B5 DB 48 BE 27 um.;.b.....H..
28160: A0 59 2D 42 70 AB 1E C3 - F3 CC E3 BD 26 93 18 29 .Y-Bp.....&..>

```

FIG. 4A

10/522509

0140:	E6	4B	A2	3F	2A	6F	CE	E2	-	29	2B	5E	6F	C6	5A	34	07	.K.?*o..>+^o.Z4.
0150:	48	87	FC	EC	88	50	FE	00	-	DC	E5	CA	9F	39	21	E4	70	H....P.....9!p.
0160:	6A	55	32	1A	B8	76	2D	8A	-	F6	C6	F4	B4	50	A5	A6	F6	JU2..v.....P...
0170:	48	BA	D0	98	02	8F	5A	1A	-	97	49	9A	48	E4	0D	18	76	H.....Z..I.H...v
0180:	09	CA	2E	36	AC	63	08	6E	-	CA	01	F6	DE	CC	60	0F	EA	...6.c.n.....
0190:	72	E7	6F	67	FE	BC	E4	1B	-	02	6A	E2	78	6C	C0	6C	CF	r.og.....j.xl.l.
01A0:	D5	B7	4A	1C	34	3F	DC	A7	-	EE	70	98	BF	48	42	02	4B	..J.4?...p..HB.K
01B0:	23	CB	BC	27	06	78	EE	93	-	EC	22	9D	19	74	25	AA	61	#...x.....tz.a
01C0:	4E	A2	E2	01	21	E1	A2	8E	-	6C	69	CC	21	83	48	84	88	N...f...li.!..H..
01D0:	36	B3	0A	57	00	68	98	9D	-	FD	EB	AE	F7	68	C6	CC	1E	6..W.h.....h...
01E0:	48	12	1A	03	DF	C7	81	F5	-	FC	22	F1	90	84	18	A6	6B	H.....".....k
01F0:	D7	72	E0	4E	60	66	41	35	-	F8	20	40	05	C2	2B	58	B1	.r.N'fA5..e...+X.
0200:	8F	C4	73	E5	22	C6	5A	02	-	78	C9	4E	A2	5C	E3	56	61	..s..Z.x.N..Ua
0210:	7B	74	53	4D	F8	BC	74	1F	-	BB	07	3B	E4	3C	5E	89	63	<tSM..t....;.<^c
0220:	1F	56	DF	73	6F	D0	E9	D9	-	9E	A6	A7	69	09	C8	72	2E	.U.so.....i..r.
0230:	BA	E8	CE	B0	B5	6C	22	0C	-	44	F9	4B	92	6C	92	88	46	.....l".D.K.l..F
0240:	B9	A9	0A	63	8E	C6	34	B8	-	00	AB	D0	73	58	58	79	E3	...c..4.....sXXy.
0250:	10	3F	5A	3D	B0	71	6A	EC	-	80	DE	36	89	FA	2E	A0	E7	?Z=qj...6.....
0260:	1F	65	C4	F7	88	38	39	68	-	AF	6B	7F	25	A4	70	A1	B6	.e...89h.k.%..p..
0270:	A5	5E	FD	E9	3D	9F	67	3C	-	0E	69	84	46	ED	FE	07	39	..^...=g<.i.F...9
0280:	AC	01	CD	A4	E9	9F	04	6B	-	A0	25	BC	55	54	57	48	A5	.....k.%..UTWH.
0290:	86	BA	CE	76	B0	FF	3A	15	-	A0	F7	30	58	B6	32	36	E8	.....v.....0X.26.
02A0:	F0	F9	EC	F7	C4	D9	02	A2	-	B2	99	87	03	C0	68	68	8A	.....hh.
02B0:	BD	D8	1A	94	5E	04	84	F8	-	32	A3	7B	68	50	DB	40	8C	.....^....2.<hP.e.
02C0:	6A	10	F2	8C	50	DE	D4	FE	-	1A	64	DE	53	F8	6F	B5	F4	j....P.....d.S.o..
02D0:	E0	1F	AC	D5	B3	AD	B8	26	-	AF	C9	5C	F3	00	43	EC	8E	.....&...\.C..
02E0:	C2	19	92	26	3C	2F	05	77	-	B9	8F	42	72	8B	41	BB	66	...&</w..Br.A.f
02F0:	7C	AC	24	A0	D4	77	6D	A6	-	32	49	92	2E	5C	8C	B9	52	!.\$..wm.2I..\.R
0300:	17	B1	92	1F	6E	A7	B6	3C	-	1E	CA	3C	96	98	30	54	14	....n.<.<...0T.
0310:	24	64	37	66	D9	9F	6C	E4	-	95	9C	B9	F9	35	A7	58	3B	\$d7f..l.....5.X;
0320:	BA	CD	1C	B8	F5	EF	01	6B	-	71	6F	F8	6C	C4	0A	90	FC	.....kqo.l.....
0330:	27	97	A5	DD	68	49	4F	E9	-	D8	8D	67	F2	D0	2C	7C	D8	'....hI0....g...!
0340:	0C	0B	48	B6	C6	F7	3E	09	-	BE	E2	F8	E1	4D	F0	70	06	..H...>.....M.p.
0350:	6C	B0	1A	CB	5A	D9	59	A6	-	10	A3	CE	D8	DB	F0	E9	8E	l....Z.Y.....
0360:	A5	4B	D2	B5	BA	8B	47	97	-	54	0F	4E	18	52	B0	D1	D6	.K....G.T.N.R...
0370:	02	73	85	27	05	A5	97	03	-	64	C2	EB	F2	3F	29	23	E0	.s'.....d....?>#.
0380:	05	5C	82	E9	80	A1	EB	45	-	42	8A	5E	04	E4	31	24	0E	.\.....EB.^..1\$.
0390:	2E	11	D0	CE	76	F0	E1	9F	-	56	35	64	63	22	F6	06	94	.....v....05dc"...
03A0:	6E	A2	98	0B	BA	1C	D0	E0	-	AE	31	24	62	0E	E8	2E	04	n.....1\$b.....
03B0:	23	CF	2E	04	0E	ED	D3	B0	-	9D	CB	2B	42	D0	D9	37	21	#.....+B..7!
03C0:	A4	89	E6	E8	56	1D	75	DA	-	D0	B3	8E	A5	62	4D	64	3D	....U.u.....bMd;
03D0:	99	E6	81	04	D3	AA	7C	1D	-	04	2F	30	76	B3	AC	95	58	.....!../0v...X

FIG. 4B

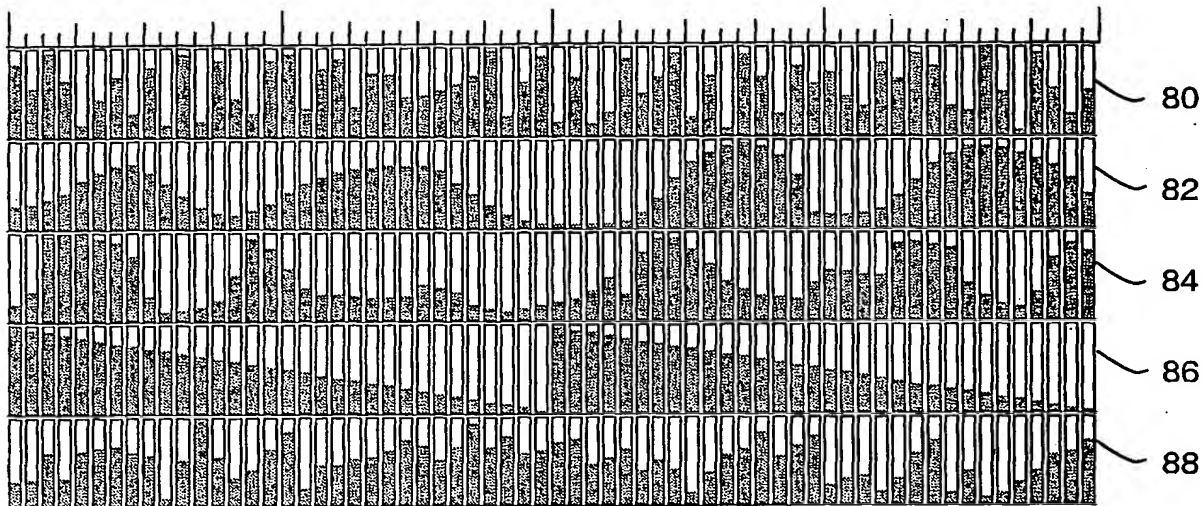


FIG. 5

Hotz Encrytor Session Creator - Advanced Editing Mode

Hotz Encrytor Session File

Open: Hotz Encryption Session Home to Office 20030907A01.hes Save Save As Mode: Advanced

Hotz Encryption Table and Mixer Settings

202 Data Step Size: 8 Bit Byte

204 Mixer Step Size: 8 Bit Byte

206 Encryption Tables

Table Size: 8-bit 256 Value Positions

208 Bank Size: 1024 Tables

Table Editor

Table Lookup Method and Optimization: Default - Complementary Bank A

Bank Select: Hotz Default 001.ecb

Load Bank Save Bank Bank Editor

Hotz Encryption Table Selection Tracks

Add New Track Web Preprocess Value Offsets Preprocess Step Offsets Premix Selection Tracks View Value Mixer View Wave forms

Hotz Encryption Table Selection Track 1

210 Track Type: File Load File: Pink Noise 16 Bit Mono R36720924579A.wav Import Track Save As

Enable Add Value Value Offset: +23 Step Offset: 2807 Loop Length: 267854 Hex Editor Waveform Editor

Hotz Encryption Table Selection Track 2

212 Track Type: File Load File: Sine Wave sweep 8 Bit Mono SW56376578942C.wav Import Track Save As

Enable Add Value Value Offset: 0 Step Offset: 0 Loop Length: File Length Hex Editor Waveform Editor

Hotz Encryption Table Selection Track 3

214 Track Type: Password Password: "7!jd!93h***** this password can be any length **\$24C892679**..... Import Track Save As

Enable Subtract Value Value Offset: 0 Step Offset: 0 Loop Length: Password Length Hex Editor Waveform Editor

Hotz Encryption Table Selection Track 4

216 Track Type: Math Modulator Load Function: Ramp oscillator look-up table, rising slope of +2 per step Import Track Save As

Enable Multiply Value Value Offset: 18 Step Offset: 0 Loop Length: 256 Hex Editor Waveform Editor

Hotz Encryption Table Selection Track 5

218 Track Type: File Load File: Rainbow color gradient RC654877387649Z.jpg Import Track Save As

Enable Add Value Value Offset: 33 Step Offset: 2453 Loop Length: 678456 Hex Editor Waveform Editor

FIG. 6

200

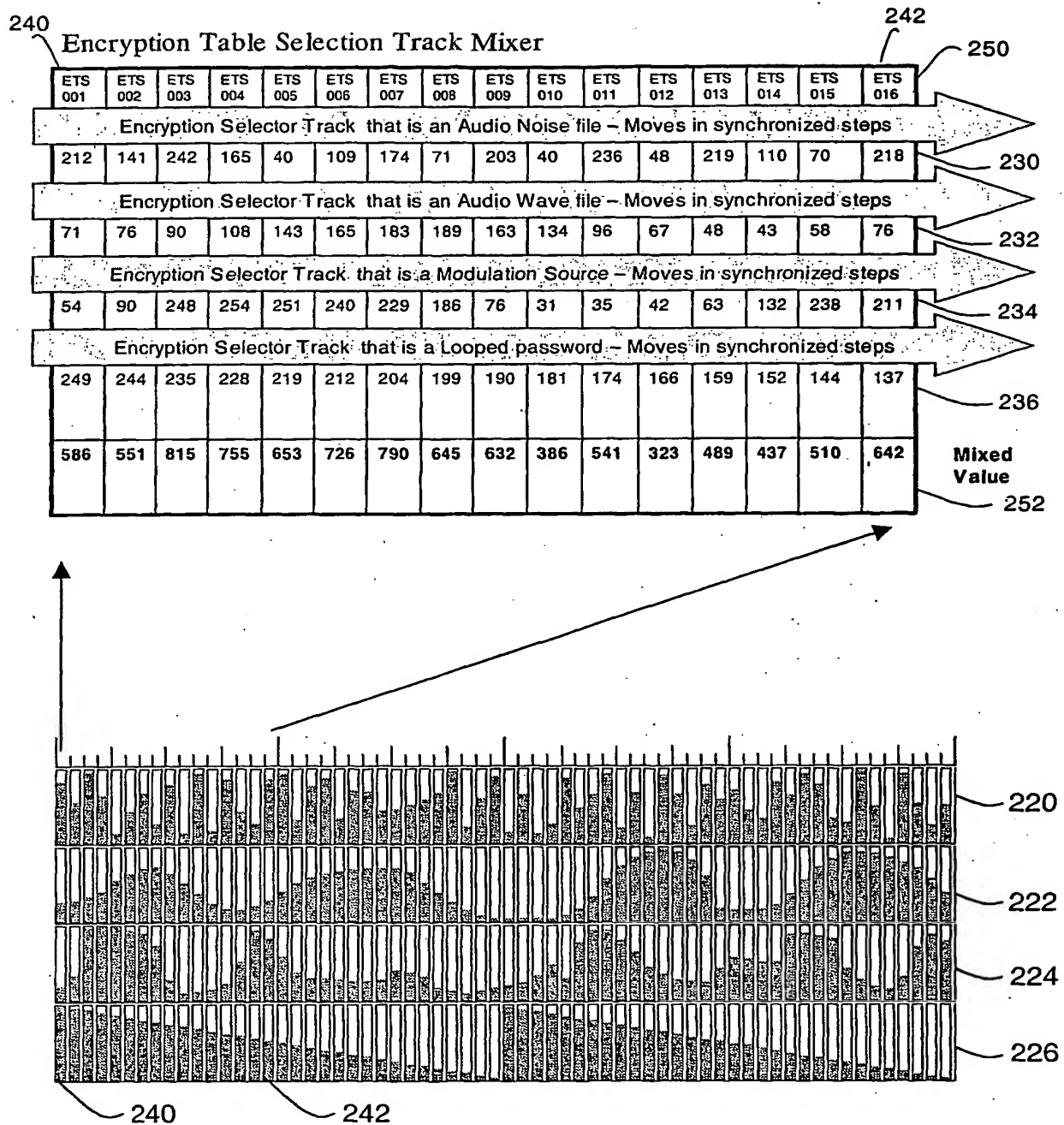


FIG. 7

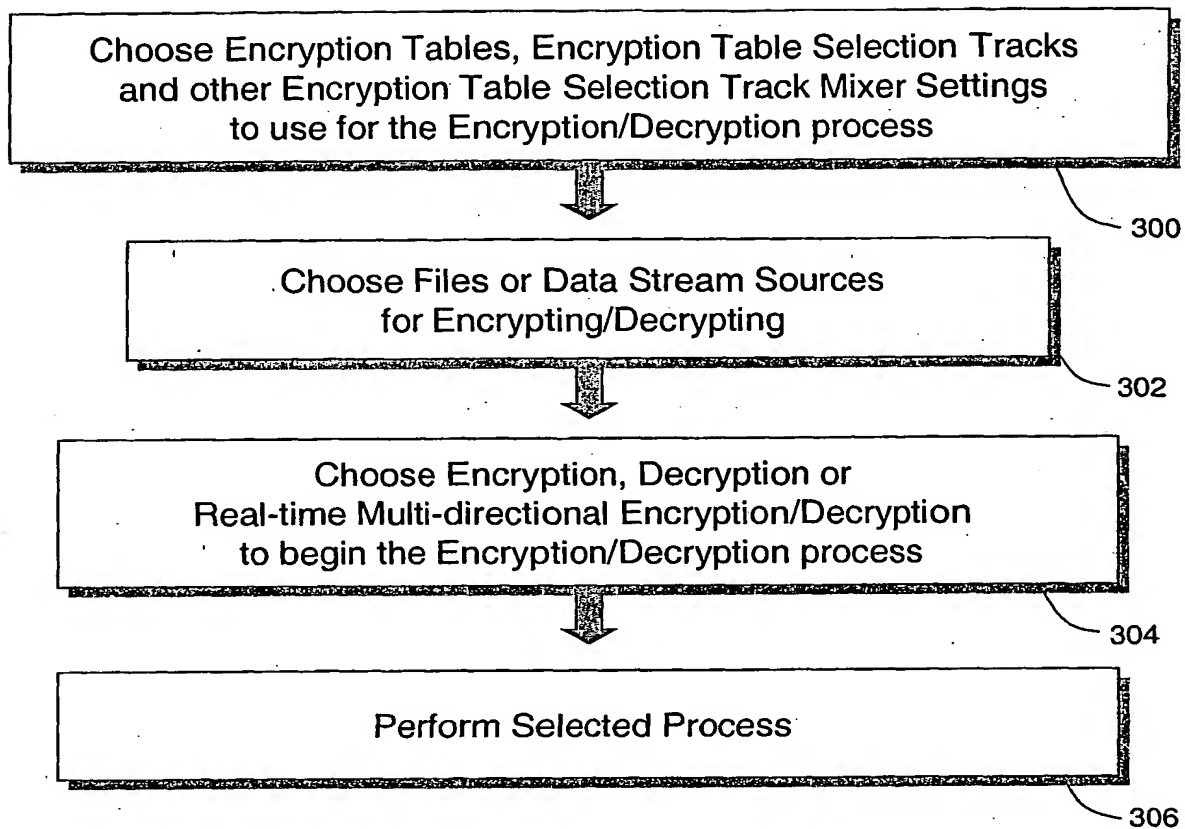


FIG. 8

10/522509

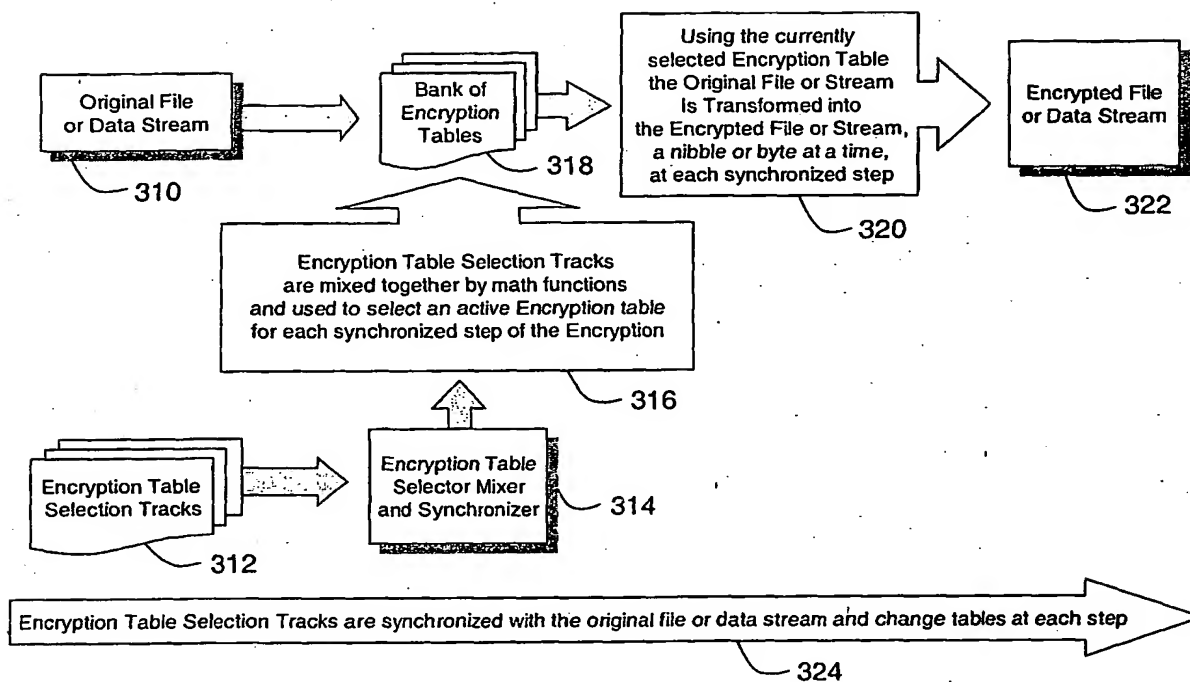


FIG. 9A

10/522509

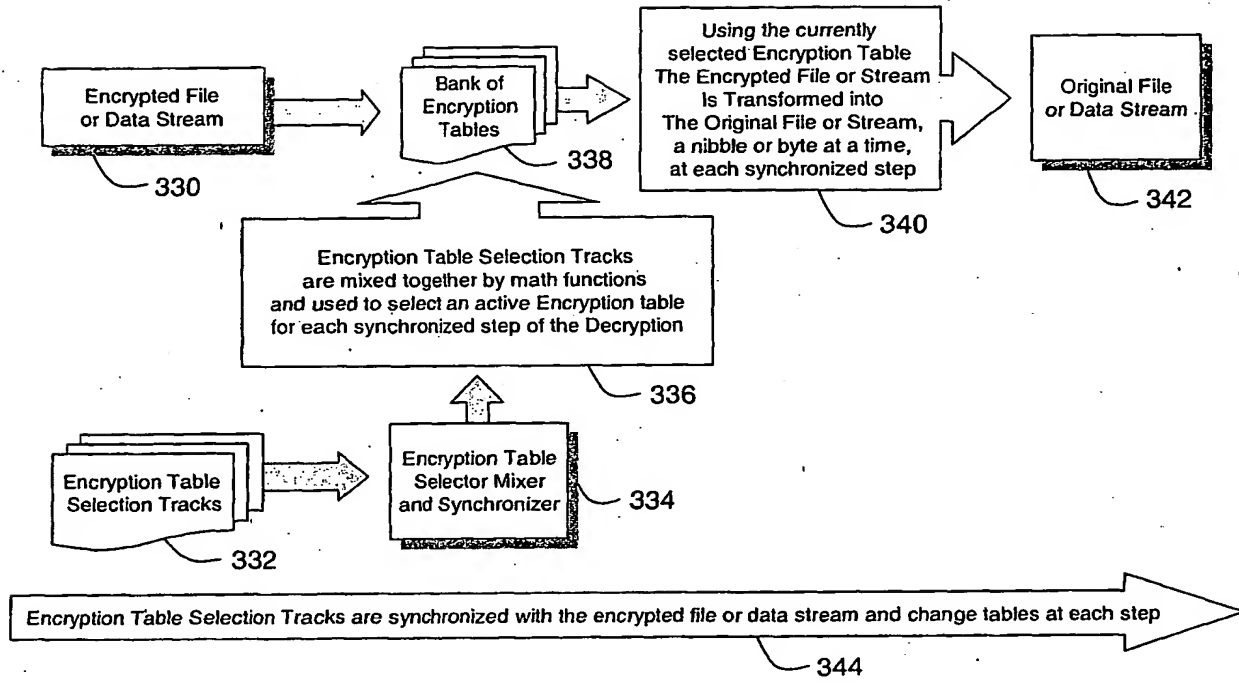


FIG. 9B

10/522509

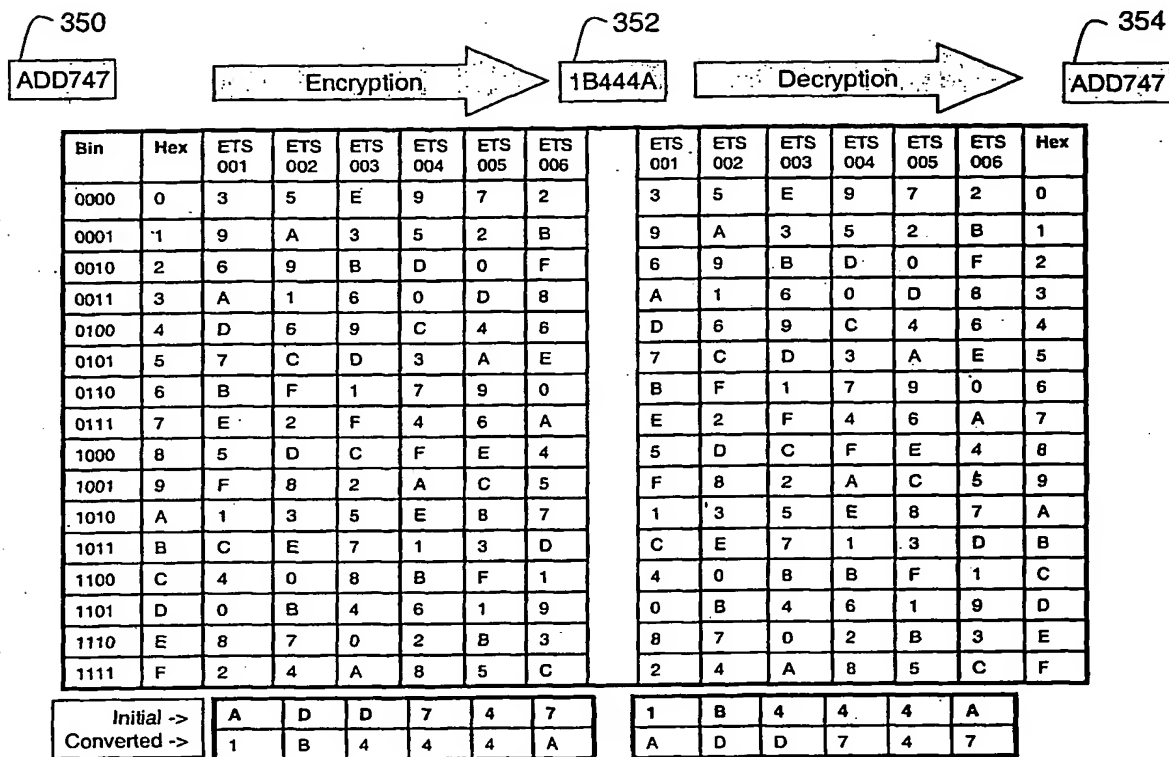


FIG. 10

↖ 400

Position	A	B	C	D	E	F	G	H
1							7	
2	1							
3						6		
4			3					
5		2						
6				4				
7								8
8					5			

↖ 402

Position	A	B	C	D	E	F	G	H
1		2						
2				4				
3								8
4					5			
5							7	
6	1							
7						6		
8			3					

FIG.11A

Event	Send		Receive	Complementary Sets		
1	2A	=	6A	Row 1	=	5
2	5B	=	1B	Row 2	=	6
3	4C	=	8C	Row 3	=	7
4	6D	=	2D	Row 4	=	8
5	8E	=	4E			
6	3F	=	7F			
7	1G	=	5G			
8	7H	=	3H			

FIG. 11B

10/522509

404

Position	A	B	C	D	E	F	G	H
1						7		
2	1							
3					6			
4		3						
5	2							
6			4					
7								8
8				5				

406

Position	A	B	C	D	E	F	G	H
1				5				
2								8
3			4					
4	2							
5		3						
6					6			
7	1							
8						7		

FIG. 12A

Event	Send		Receive	Redirected			
1	2A	=	7A	Row	1	=	8
2	5B	=	4B	Row	2	=	7
3	4C	=	5C	Row	3	=	6
4	6D	=	3D	Row	4	=	5
5	8E	=	1E				
6	3F	=	6F				
7	1G	=	8G				
8	7H	=	2H				

FIG. 12B

10/522509

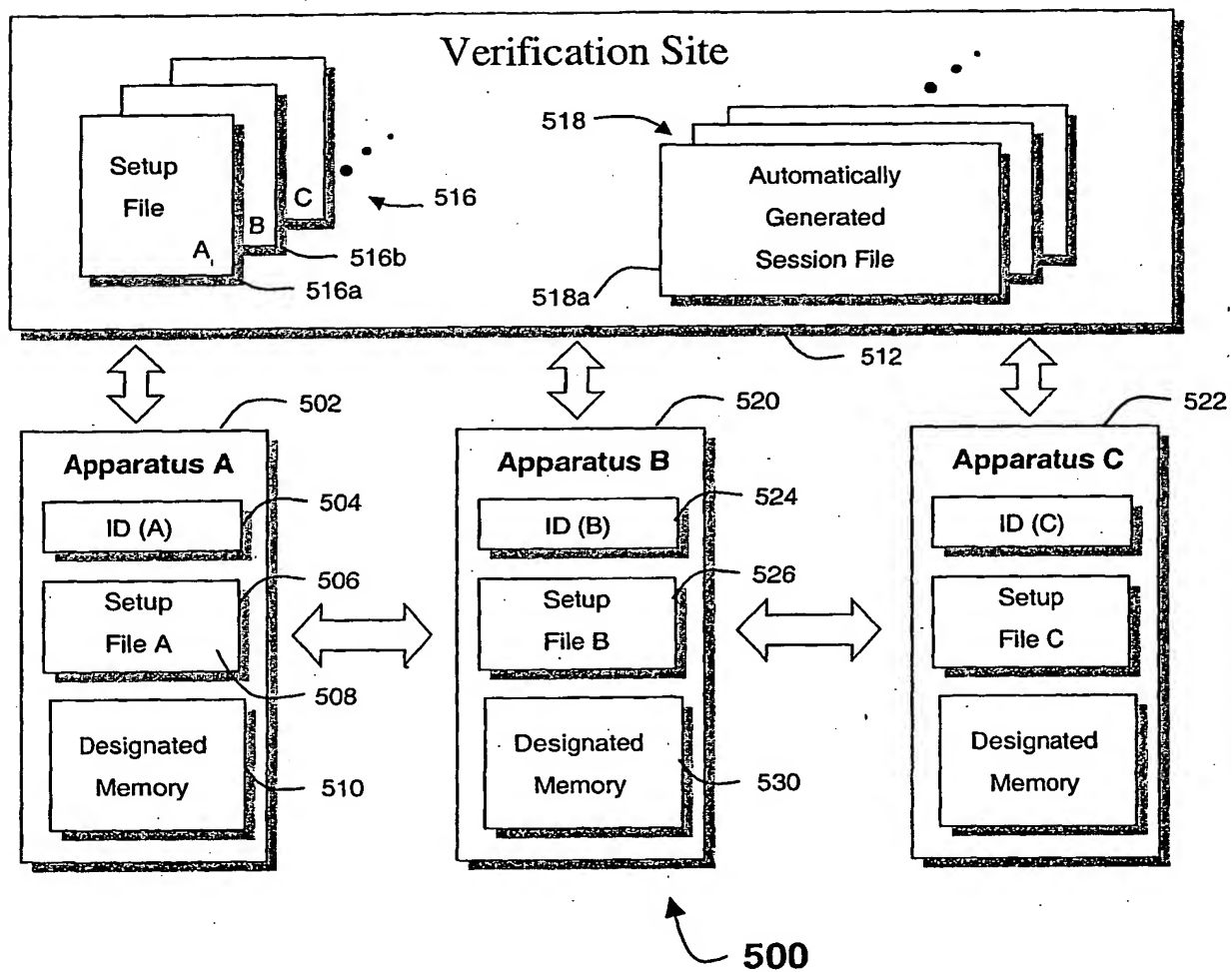


FIG. 13

10/522509

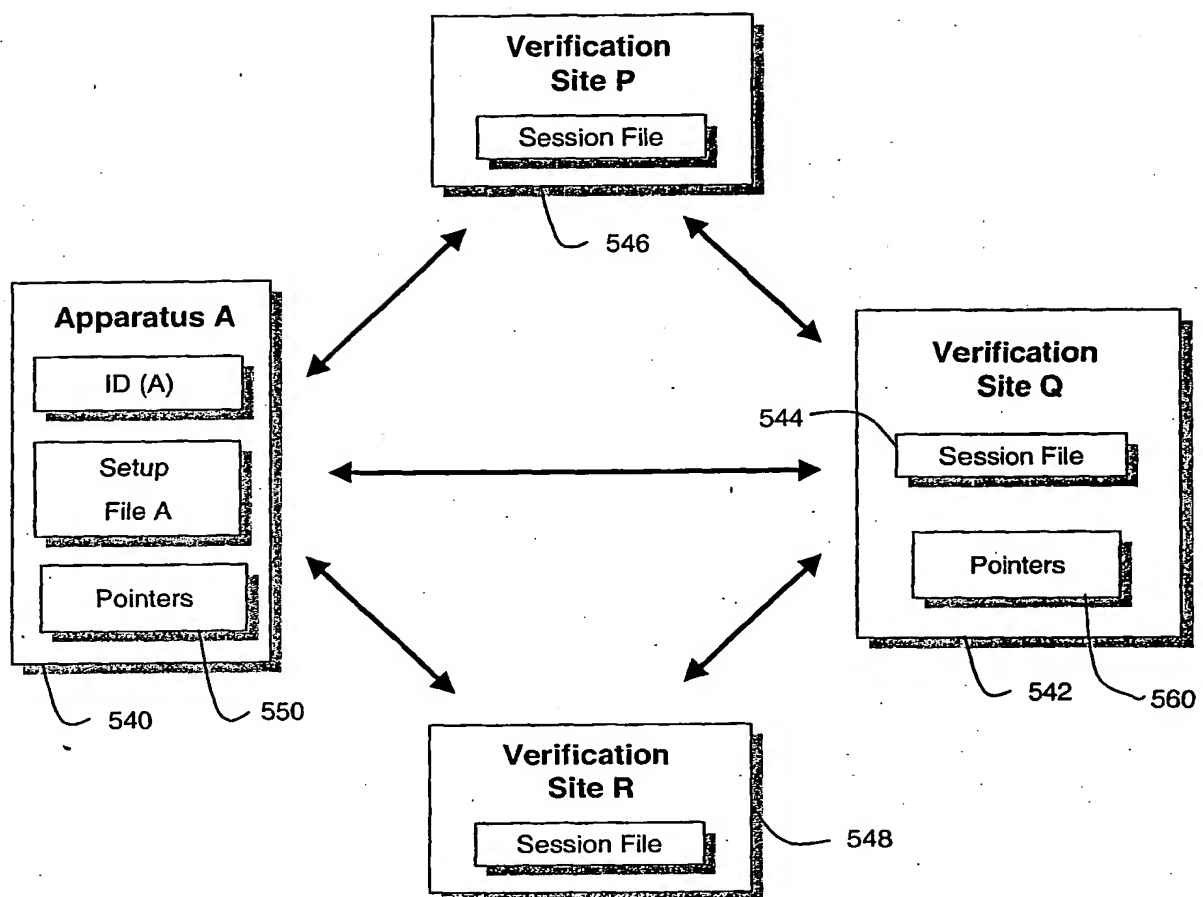


FIG. 14

10/522509

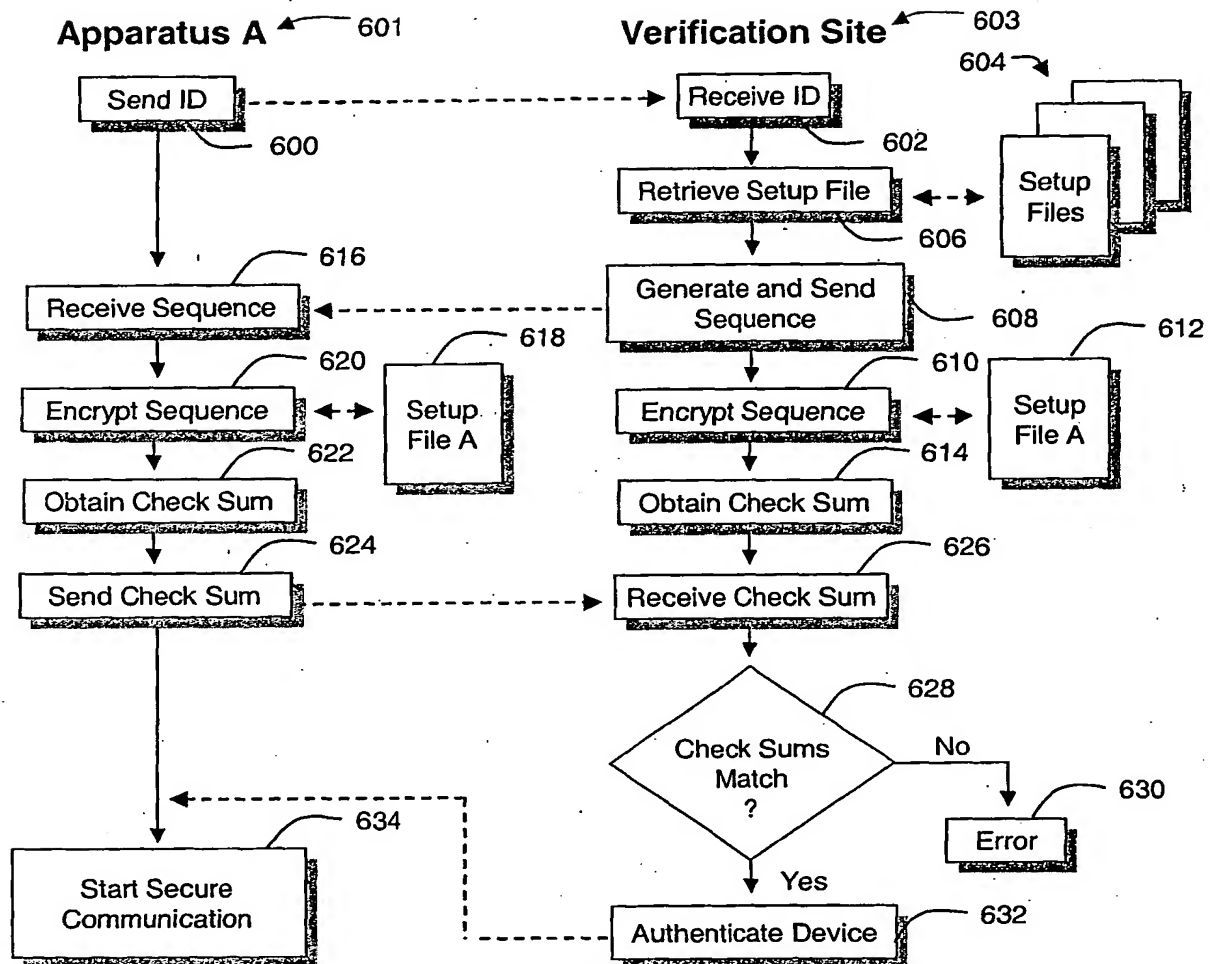


FIG. 15